Salton Sea UPDATE
SPECIES CONSERVATION HABITAT PROJECT

U.S. ARMY CORPS OF ENGINEERS
CALIFORNIA NATURAL RESOURCES AGENCY
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

MARCH 2013

Grant Funding Coming from Salton Sea Financial Assistance Program

Salton Sea grant awards are coming soon! Yes, after many months of working vigorously to get the Salton Sea Financial Assistance Program up and running in accordance with State regulations, proposals are being evaluated and grant awards are expected to be announced by this June.

The Salton Sea Financial Assistance Program (FAP) is funded through the California Department of Fish and Wildlife (CDFW) and administered by the Department of Water Resources (DWR) under the State's Salton Sea Species Conservation Habitat Program.

While the FAP is the primary responsibility of the State to develop and manage, numerous agencies, subject area experts, and knowledgeable locals provided input into the final structure and focus of the program. The FAP currently has $3 million available to fund local projects in the Salton Sea and its tributaries in 2013.

The FAP is focused on funding projects that would improve habitat for fish and wildlife at the Salton Sea. Four general categories of projects are considered: 1) Habitat Creation and Enhancement projects that provide functional habitat for the protection of fish and wildlife in the Salton Sea; 2) Water Quality Improvements that would directly contribute to the conservation of fish and wildlife resources in the Salton Sea; 3) Research Activities that directly resolve data gaps currently acting as impediments to creation and enhancement of fish and wildlife habitat in the Salton Sea; and 4) Adaptive Management Experiments that would improve the effectiveness of habitat management and habitat quality for fish and wildlife at existing habitats at the Salton Sea.

The FAP is an important step in helping to address the decline in fish and wildlife habitat and the overall environmental problems in the Salton Sea. The focus of the program is to respond to the immediate ecological needs in the watershed by involving local expertise to develop or better understand important fish and wildlife habitat.

CDFW and DWR have received seven applications for FAP grants which collectively exceed the $3 million that is available for grants this year. Since funding is limited, it is unlikely that all projects will be awarded money in this cycle. The Departments are evaluating and scoring all of the applications. The projects with the highest scores will receive grant funding.

Design and Construction Challenges

Renowned American philosopher and educator John Dewey once said "we only think when we are confronted with problems."

The project team discovered how true this quote is when it began the design of the Salton Sea Species Conservation Habitat (SCH) ponds. As one would expect, our team attempted to apply proven design approaches that have been successfully used elsewhere in the State to construct habitat ponds. Going into the project we understood that the conditions in the Salton Sea would require us to make some level of design "tweaks". However as we ventured further into the process it became abundantly clear that our design challenges would require much more than tweaks. We had some significant problems to confront and as John Dewey said would require some real thinking. And that is exactly what we did.

The design and construction challenges for the SCH Project are unique due to the location of the project and site-specific soil conditions. The overall purpose of SCH is to demonstrate that we are able to create a range of habitats that will support fish and wildlife species dependent on the Salton Sea, and implement an adaptive management program that will collect project performance data and guide future pond operations. There are many factors that create significant design challenges and consequently contribute to significantly higher construction costs when compared to

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Design and Construction Challenges (Continued from Page 1)

other wetland projects. The main structural element of the SCH ponds is the water retention berms. These are necessary to create the ponds by retaining and controlling water on the receding playa.

The native soils at the Salton Sea are very weak and dispersive. Therefore, specialized construction techniques are required to construct the berms, support them and strengthen their foundations. The traditional, straight forward design of simply piling excavated soil into a linear berm does not work due to the soft foundations. By necessity the berm design has evolved into a more complex structure in order to meet stability requirements.

Reducing the high capital costs of building the salt water supply infrastructure (including the power supply) has also been challenging. To achieve the proper salinity balance in the ponds, salty water from the Sea will be blended with fresher water in the New River. Pumps will be required to deliver water to the project from both sources. To protect desert pupfish, Sea water must be taken from quite a distance from shore, requiring the installation of a saline water delivery pipeline. The configuration and location of the Sea pump and associated plumbing are complicated by the realization that the Sea will continue to recede, perhaps requiring a relocation of the plumbing to deeper water in the future.

The Salton Sea is notorious for extremely high winds. In terms of construction challenges we anticipate the berms will be subject to substantial erosion forces from wind generated waves. We have taken these forces into account and incorporated erosion control measures into the design of the ponds.

Finally in order to provide more favorable conditions for target fish populations in the habitat ponds, the project includes habitat channels dredged up to 6 feet deep for predation escape and to give fish thermal refuge during seasonally extreme environmental conditions. Additionally we have designed both large and small islands into the construction plans in order to give birds a safe place to rest and possibly nest. Such safe areas are severely limited around the Salton Sea.

This project will be the first of its kind to be built on the receding sea bed. We are forging new territory in this type of habitat development. The SCH project strikes a balance between delivering habitat goals and field testing innovative engineering solutions.

Project Status
SCH Nearing Environmental Certification

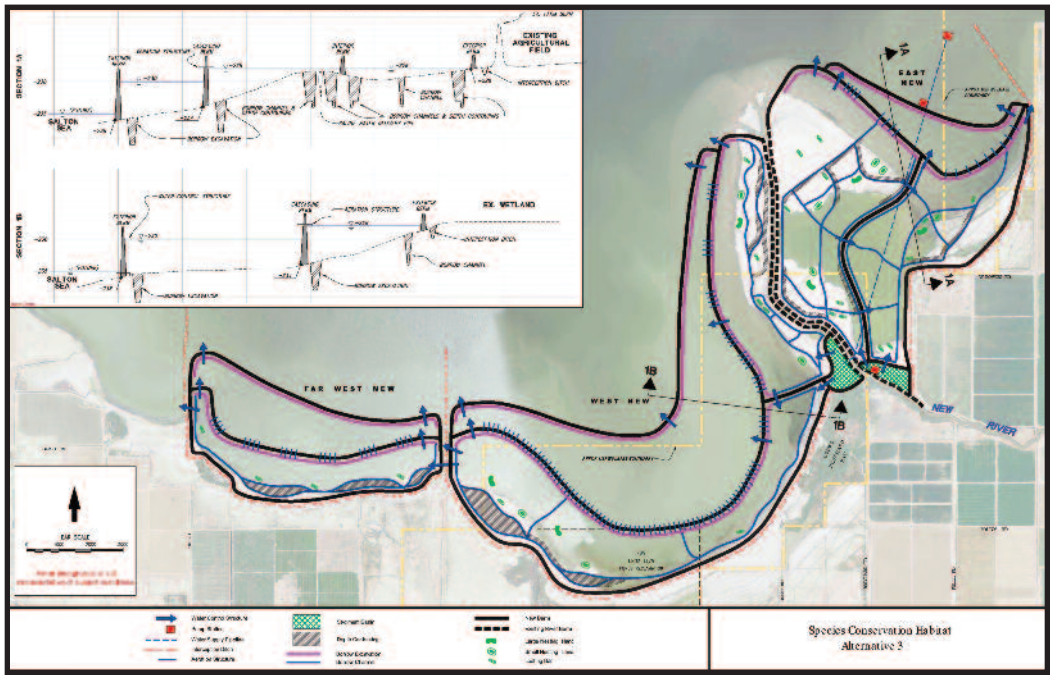
The environmental analysis process for the Species Conservation Habitat project formally began in June 2010 with the release of Notice of Application and Notice of Preparation. While a significant amount of time has passed we are very confident that the hard work of the project team has produced a sound project design with minimal incidental impacts.

The project team has worked creatively to overcome design and construction challenges. And while it is always difficult to exactly predict how a project will translate from paper to the field, we are confident that the project will produce significant benefits for our target species: fish-eating birds.

Throughout the environmental process our team has worked hand in hand with the Army Corps of Engineers. From the outset, representatives from the Corps agreed to sit on our project planning team as the NEPA lead agency and to facilitate the acquisition of a Section 404 permit under the Clean Water Act. Because the project is expected to affect State and federally endangered desert pupfish, a Biological Opinion from the US Fish and Wildlife Service was necessary. The Corps was instrumental in coordinating with the Service to help work through this process.

SCH project cleared a significant hurdle when the Fish and Wildlife Service finalized their Biological Opinion for desert pupfish. Their issuance of an incidental take authorization under Section 7 of the federal Endangered Species Act enabled the Corps to finalize their Section 404 Alternatives Analysis which concurred with the State that Alternative 3 is the "Least Environmentally Damaging Preferred Alternative". The Corps is expected to issue the 404 permit in April. This paves the way for the completion of the Final Environmental Impact Report and Environmental Impact Statement for the project in early spring of this year. This is a major step in moving the SCH project toward construction.

When all of the permits are obtained, the Departments will work with the Imperial Irrigation District to develop a construction bid package. The Departments anticipate completing the construction bid package by late 2013.



Project Success Through Stakeholder Partnerships

The Salton Sea SCH project has been developed through an ongoing stakeholder process that has brought together many varying interests.

As the SCH project has progressed through the planning and review process, the numerous stakeholders have come together for dozens of meetings large and small to help shape a meaningful project. This kind of involvement and broad based support has been the key to the success of the SCH project. Without these partnerships, the project would have been far more difficult to plan and move through the public environmental review process.

Bruce Wilcox of the IID explains the panoramic view atop Red Hill Marina to Manuel Perez, Ken Salazar, Dr. Raul Ruiz, and Barbara Boxer

The Imperial Irrigation District (IID) owns a tremendous amount of land in and around the Salton Sea and has worked very cooperatively with the State departments on numerous aspects of the SCH project. The SCH project is planned for construction on IID land, so IID is helping facilitate access to the property. IID's energy department is helping the State project team navigate issues related to the proximity of geothermal resources to the project area and bringing power supply to the project pumps. It is important to the economic development of the region that the configuration of the SCH project not preclude the development of renewable resources like geothermal. IID has assisted our planning team with the design of drainage ditch connections and management of the interceptor ditch that carries agricultural drain water around the perimeter of the project. And finally, IID will provide a very important role in the construction management phase of the project. Construction management provides the "ground-truthing" necessary to insure that the project is built to specifications. The State SCH project planning team is grateful for IID's enthusiastic support and involvement in the project.

Our friends in Washington D.C. have been on board with this project since the inception. The Army Corps of Engineers Regulatory office has dedicated a local staff person to assist in moving the SCH project through the NEPA and Section 404 Clean Water Act permitting processes, and to coordinate endangered species regulatory compliance with the U.S. Fish and Wildlife Service. Additionally the Corps has worked closely with California's Congressional members to investigate the possible use of Water Resource Development Act funds to expand the SCH pond systems. Our team has also received invaluable technical and scientific support for project design and monitoring from the U.S. Geological Survey Salton Sea Science office.

At the State level, the California Wildlife Conservation Board has demonstrated its support of the SCH project by directing Proposition 50 funding toward project construction.

The Salton Sea Authority and the various Non Governmental Environmental Organizations have worked closely with our team and other key stakeholders to provide insight and guidance for the design and implementation of the SCH project. Additionally, these groups provided valuable comments during the development of the local Financial Assistance Program.

Designing and building a complex environmental restoration project such as the SCH project is an extraordinarily difficult task that would have been nearly impossible without the assistance and cooperation of the many stakeholders and partners we have in the Salton Sea. Thank you to all!

What is the Near Term Future of the Salton Sea?

By Kent Nelson
Program Manager
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When most people think of the Salton Sea these days they think of its vast array of challenges. The recent "Big Stink" was a harsh reminder for Southern California that the troubles faced by the Sea reach well beyond the residents in the Imperial and Coachella Valleys. The anticipated receding of the shoreline in the coming years combined with strong seasonal winds is likely to produce dust that is damaging to human health, wildlife, and crops.

The plight of the Salton Sea affects a broad group of stakeholders whose livelihood is connected with the Sea and the complex water agreements that govern water distribution from the Colorado River.

Decades of hand-wringing and rumination about how to "restore" the Sea have yet to produce consensus on a fundable restoration plan. California's delicate financial health has made it difficult for project planners to rely on a large, single source of funding from the State. With the State's fiscal resources limited, it is going to take a combined financial commitment at all levels of government and business to tackle the scope of the Sea's problems. We are faced with a very expensive task.

It may also be time to take a hard look at what it means to "restore" the Salton Sea and what entities are best suited to focus on the various restoration elements. A revised vision of the Sea must be coupled with a realistic funding program if we hope

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What is the Near Term Future of the Salton Sea?

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to minimize the impacts of foreseeable changes at the Sea. The State has a significant role in developing sustainable solutions. An incremental or phased approach to restoration may be the most realistic strategy.

The SCH project represents the first steps toward this incremental restoration. Habitat ponds like SCH are common to all proposed restoration plans and represent the best near-term path toward replacing productive habitat before it becomes hyper-saline in the future. Linking future SCH-like habitat ponds with existing habitat conservation efforts by CA State Parks, the Sonny Bono National Wildlife Refuge, duck clubs, local tribes and Imperial Irrigation District will begin to create a habitat mosaic that will benefit many wildlife species dependent on the Sea. Significant biological synergies may be realized by positioning varying habitat types adjacent to each other, like assembling a puzzle.

This "No Regrets" strategy can be implemented as funding becomes available.

Although preserving the biological values of the fish and wildlife that are dependent on the Sea is the primary goal of the SCH project. The project has a secondary benefit of helping to address air quality problems by placing the SCH ponds on the drying playa. Future projects may focus on other important goals of overall restoration.

The State will continue to coordinate with Salton Sea stakeholders and landowners to map out an achievable strategy that meets State and local goals for habitat conservation and air quality management.

We have made tremendous strides towards addressing problems in the Salton Sea and need to continue to work together to achieve our common goals by confronting these challenges one small piece at a time. By collaborating and demonstrating success in the implementation of a project, we can hopefully gain the support of the legislators for further actions and funding to restore the Salton Sea.

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